

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Santa Clara Wastewater Treatment Plant Emergency Response - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IX**

**Subject:** **POLREP #4**  
**Work Continues**  
**Santa Clara Wastewater Treatment Plant Emergency Response**

**Santa Paula, CA**  
**Latitude: 34.3144538 Longitude: -119.1024780**

**To:** Harry Allen, EPA Region 9  
Kathleen Salyer, EPA Region 9  
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**From:** Martin Powell, OSC

**Date:** 12/14/2014

**Reporting Period:** 12/6/2014-12/14/2014

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	A973	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	11/18/2014	<b>Start Date:</b>	11/18/2014
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>	CAN000900238	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Emergency Response

#### 1.1.2 Site Description

The incident began at approximately 3:30 am on November 18, when a vacuum truck exploded. Reports vary as to what activities lead up to the explosion (one suggested that the operator had begun aggregating wastes from totes at the facility into the vac truck). A fire ensued, eventually involving several waste streams, including oxidizers, acids, polymerizing agents, and possibly chlorine tablets. It is not clear what was in the vac truck when the explosion began. The secondary containment filled with a watery sludge from the mixed chemicals.

Almost immediately, fine crystals formed on the drying surfaces from the chemical mix; these were found to be shock sensitive, and the VCFD experienced a couple of incidents of sparks and small explosions from walking on the crystals. VCFD Haz Mat indicated that all tests on the crystals indicated an organic peroxide. VCFD and Santa Paula fire each abandoned one firefighting rig in the facility due to contamination with shock-sensitive organic peroxide. The Ventura County Sheriff conducted an evacuation out to a distance of one half mile and a shelter in place advisory was issued to residents located up to three miles downwind.

#### **1.1.2.1 Location**

815 Mission Rock Road, Santa Paula, CA 93060

#### **1.1.2.2 Description of Threat**

The fire has been extinguished, although a significant smoke plume/gas cloud was observed to leave the site.

The following inventory summarizes chemicals reported to be on the site prior to the fire. It is believed that other unknown chemicals were also present.

Common Name	Maximum Amount Onsite
motor oil	110 gallons
oxygen	1,000 cubic feet
acetylene	600 cubic feet
potassium permanganate	1,500 pounds
diesel fuel	500 gallons
320-L polymer	1,980 gallons
460-TC polymer	660 gallons
chlorine tablets	2,750 tablets
hydrogen peroxide	3,300 gallons
soda ash	3,300 gallons
sodium hypochlorite	990 gallons
aluminum chloride	1,650 gallons
anionic polymer	2,750 gallons
defoamer	110 gallons
emulsion breaker	110 gallons
ferric sulfate	3,300 gallons
sulfuric acid 93-99%	660 gallons
used motor oil	110 gallons
used motor oil filters	100 gallons

#### **1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**

Due to the nature of the hazards onsite, the site assessment process is running in parallel with cleanup/neutralization operations. While the specific chemicals of concern are unknown, the driving hazardous are pH and oxidizers. The oxidizers are shock sensitive, erupt in a flash of fire, and are pervasive onsite. Therefore neutralization efforts are employed prior to assessment, with assessment serving as confirmation of successful neutralization. This process continues as areas of the site are cleared, thus allowing access to the uncontained mixture of chemicals located in the center of the site. Traditional offsite laboratory analysis is currently unavailable due to the hazard that samples pose to the lab equipment and personnel. Alternative methods are being explored, as are stabilization alternatives for the ponded chemical mixture on site.

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

#### **2.1.2 Response Actions to Date**

**12-06-2014 Day 19** 1 OSC, 1 START, 2 Strike Team. Operations applied sodium sulfite solution to surfaces in areas B1 through B4, pressure washed, and conducted swipe sampling to confirm the area is free of corrosives and/or oxidizers. Ops crews were unable to begin decontamination of the vac truck in area B2; this truck is blocking full access to the southern approach to the containment pond.

Ops crews also pressure washed the two trucks in the northeast corner of the facility, but were unable to complete offloading the contents to Baker tanks by the end of the ops period. One of these trucks will be demobilized from the site, and the other will be used to remove stagnant rainwater from the areas along the southern approach into the site.

CTEH's chemist also haz catted the seven samples collected during the Level B entry on 12-04-2014. Haz Cat results indicated no RCRA characteristics in the samples collected except: a strong oxidizer (~10 ppm) result from the solid, white sample collected from the ground in front of the tank truck in Area B2 (sample 12/5-4); IR spectra from this sample suggest a chlorite/chlorate compound. The pH in the samples range from 5 to 11.

CTEH Submitted a Waste Management Plan to the IC for approval.

**12-07-2014 Day 20** 1 OSC, 1 START, 2 Strike Team. Patriot/CTEH continued clearing the entry areas up to the sludge pond.

**12-08-2014 Day 21** 1 OSC, 1 START, 2 Strike Team OSC Dunkelman replaced OSC Powell. CTEH/Patriot attempted to tow the 120-barrel Patriot vacuum truck out of the pool area. The battery was dead and the air brakes were found to empty. Patriot brought in a compressor to refill the air brakes prior to towing the truck into Sector B-2. When the brakes were refilled, Patriot towed the 120-barrel out of the pool and into B-2 for additional decon. Neutralization solution was reapplied to the driver side door.

Santa Paula Fire arrived at Unified Command and requested the results from the CTEH swipe samples on Engine 82. Several Fire Department employees have been complaining of respiratory irritation which they believe is related to the contamination of the Engine. CTEH dispatched an air monitoring team to the Santa Paula Storage Yard to monitor near Engine 82 – no elevated readings were observed.

Patriot/CTEH conducted a bench test on solidification materials. Powdered rock was chosen based on availability and ease of access. The initial bench test revealed that powdered rock absorbs approximately 20% of its weight alone. Additional mixtures with Portland cement will be conducted tomorrow.

**12-09-2014 Day 22** 1 OSC, 1 START, 2 Strike Team

Patriot/CTEH extended their decon zone into Sector A1. CTEH/Patriot procured a 1,000 gallon "water buffalo" to spray neutralization solution on site. Patriot/CTEH applied solution to Sector B2, B3, C1, D1 and the water truck on site. The water truck was also found to have a dead battery, so it will not be moved out of the contaminated area today. Neutralization solution was applied to Engine 26 in the pool as well as on the western edges of the pond.

EPA, Patriot, and CTEH attended a Ventura County Board of Supervisors meeting to provide updates on the Site.

Samples of the pool in D2 were collected for use in additional bench tests of the solidification material. Powdered rock and Portland cement were mixed with samples at a ratio of 10 to 1, 5 to 1, and 1 to 1. The ratio of 1 to 1 was found to be the most effective, absorbing approximately 40% of its own weight.

**12-10-2014 Day 23** 1 OSC, 1 START, 2 Strike Team CTEH/Patriot moved the 120-barrel truck from A1 into F2 for storage. Swipe sampling cleared the truck for oxidizers in all places except the cup holder and the driver's side floor. Additional solution was applied and the truck was cleared. CTEH/Patriot towed Engine 26 out of the pool and into B2 to conduct gross decon on the truck. The Engine was also found to have a dead battery and empty air brakes.

Upon removing Engine 26, the pool was observed to be approximately 6-12" of liquid over several feet of polymer at the bottom.

Berm repair was completed by Patriot under the advisement of Ventura County Health Department. Additional loads of sand and gravel were applied to areas which looked to be insufficiently bermed or needed repair following the last rain event.

CTEH/Patriot presented a plan to extend the operational period to 48 hours which was supported by EPA and Ventura County Health.

CTEH/Patriot has revised plans for the rain event to include a vac truck and personnel on-call in case of pooling water on the site.

**12-11-2014 Day 24** 1 OSC, 1 START, 2 Strike Team Patriot/CTEH conducted a meeting with Ventura County Health (VCHD), EPA, and additional stakeholders to discuss the schedule of work going forward. EPA and VCHD has expressed concern over the schedule of operations and the size of personnel teams on Site. Patriot says they will address those concerns.

Work continues on the Site in an attempt to prepare for the rain event. Significant downpours are expected from midnight through the early mornings. Patriot will stage two vacuum trucks and staff personnel overnight to monitor the site response to rain.

Neutralization solutions application continued on the fire truck and water truck. Additional solution was applied to D area and C area.

CTEH submitted a Tank/Tote sampling plan to EPA for comment. EPA, VCHD, and START conducted a review of the plan and submitted comments to CTEH. CTEH intends to resubmit the plan as early as Friday.

**12-12-2014 Day 25** 1 OSC, 1 START, 2 Strike Team. Heavy rains occurred through the night, causing flooding onsite. Patriot/CTEH performed storm water management activities, including transferring approximately 60,000 gallons of rainwater to Baker tanks. No site mitigation activities occurred today.

EPA, County and START performed a site walk to observe the efficacy of berming efforts. EPA and START observed water penetrating the sandbag walls, and noticed a sheen on water leaving the southwest corner of the site. However, fluid from the containment area did not leave the site.

The START reviewed the second draft of the *Tank and Tote Inventory Sampling and Analysis Plan*.

**12-13-2014 Day 26** 1 OSC, 1 START, 2 Strike Team. 1 OSC, 1 START, 2 Strike Team. Patriot/CTEH submitted a revised Tank and Tote Inventory Sampling and Analysis Plan, as well as a Water Solidification Plan. The IC reviewed both plans and provided comments. The Tank and Tote Inventory Sampling and Analysis Plan was accepted without further comment; the Water Solidification Plan required several rounds of review and was accepted by the evening Ops Briefing.

Site operations included applying sodium sulfite solution to D5 and a portion of D4. In addition, crews conducted visual assessments of 55 frac tanks at the site. Although EPA and County had approved the solidification plan, solidification activities did not begin as Patriot had not obtained solidification materials in advance and the facility was closed for the weekend. Throughout the course of the day EPA noted that the pace of work was very slow and pointed this out repeatedly to Patriot, CTEH and the PRP representative.

**12-14-2014 Day 27** 1 OSC, 1 START, 2 Strike Team. There were limited onsite operations by Patriot. CTEH personnel, supported by Patriot, continued sampling of tanks onsite, and initiated HAZCAT analyses of these samples.

### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Southern California Wastewater (aka Southern California Wastewater) is believed to be the owner/operator of the facility. Green Compass, is believed to be their parent company. Work at the site is being conducted by Patriot Environmental Services, who has provided EPA a copy of a Master Services Agreement. This agreement between Patriot Environmental Services and Southern California Waste Water is dated 11/18/2014. The following services are requested under this agreement: provide

personnel equipment and materials to post fire cleanup at Mission Rock located as directed.

OSC Powell has provided verbal notice to the PRP's legal counsel on 11/24/2014, and to the PRP on 11/25/2014. A NFRA was issued to the Plant's Operation Manager on 11/26/2014. On 11/28/2014 the Plant's Operation Manager stated that the NFRA had been provided to the PRP. A signature memorializing receipt of NFRA was received on 12/07/2014.

## **2.2 Planning Section**

### **2.2.1 Anticipated Activities**

Conduct all work in a safe manner  
Continue to evaluate contamination of the facility  
Continue to evaluate any offsite impacts  
Continue to decontaminate trucks and apparatus that inhibit safe access to work areas  
Continue cleanup of facility, and initiate treatment/disposal of waste material  
Continue to keep the community and response partners informed of site activities  
Prepare for rain events

#### **2.2.1.1 Planned Response Activities**

#### **2.2.1.2 Next Steps**

Continue site operations

#### **2.2.2 Issues**

Onsite contamination is extremely reactive. Onsite personnel (with support from offsite resources) are continuing to evaluate treatment/neutralization or stabilization options which will render the material safe for disposal.

## **2.3 Logistics Section**

No information available at this time.

## **2.4 Finance Section**

No information available at this time.

## **2.5 Other Command Staff**

### **2.5.1 Safety Officer**

### **2.5.2 Liaison Officer**

### **2.5.3 Information Officer**

Public affairs are being handled by Ventura County OES and FD.

EPA does not have a PIO onsite. Nahal Mogharabi is serving as the EPA PIO from a remote location and will provide onsite support if requested.

## **3. Participating Entities**

### **3.1 Unified Command**

Santa Clara Wastewater Treatment, EPA and Ventura County Environmental Health

### **3.2 Cooperating Agencies**

Ventura County Fire  
Ventura County Sheriff  
Santa Paula Fire  
Ventura County Agricultural Commission  
U.S. Food and Drug Administration  
CA Department of Public Health, Food and Drug Branch  
CA OSHA

**4. Personnel On Site**

No information available at this time.

**5. Definition of Terms**

No information available at this time.

**6. Additional sources of information**

No information available at this time.

**7. Situational Reference Materials**

No information available at this time.